# RECORD OF DECISION AND APPROVED BIG DRY RESOURCE AREA MANAGEMENT PLAN

## **MAINTENANCE VERSION**

(all additions are indicated in italics)

Last Update - April 2000

## **SUPPLEMENTS TO THE RMP:**

1997 - Calypso Trail Supplement to the Big Dry RMP

## AMENDMENTS TO THE RMP:

1997 - Record of Decision for the Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Montana, North Dakota, and South Dakota

1999 - Record of Decision for the Makoshika State Park Amendment to the Big Dry RMP (Makoshika Amendment)

The following document incorporates changes (amendments and maintenance) to the Big Dry RMP. All additions are noted in italics. The amendments cited are comprehensive documents that went through the planning process. The reader should refer to the amendment itself for details regarding public participation, rationale for decisions, bibliography information, maps, etc. Copies of amendments are available from the Miles City Field Office.

#### INTRODUCTION

The purpose of this document is to approve the BLM management decisions on approximately 1.7 million acres of BLM-administered land and 7.6 million acres of BLM-administered mineral resources in the Big Dry Resource Area.

This Record of Decision approves the decisions made in the 1995 Proposed Big Dry Resource Management Plan and Final Environmental Impact Statement published in February 1995, with the exception of decisions relating to the Calypso Trail near Terry, Montana.

#### **DECISION**

The decision is hereby made to approve the proposed Big Dry Resource Management Plan as described in the 1995 Proposed Big Dry Resource Management Plan and Final Environmental Impact Statement with the following exception. This plan was prepared under federal regulations including the Federal Land Policy and Management Act of 1976 and the National Environmental Policy Act of 1969, as amended. The preferred alternative (Alternative D) in the 1995 Proposed Big Dry Resource Management Plan and Final Environmental Impact Statement has been selected as the approved resource management plan.

RMP supplement May 1997: The Calypso Trail will remain open to motorized vehicles and off-road travel is limited to the road itself.

#### **EXCEPTION**

Additional planning has been conducted for the decision regarding the Calypso Trail. Comments have been gathered, and a protest period on the Calypso Trail decision only will be reopened. This information may be found in the 1996 Calypso Trail Supplement to the Big Dry Resource Management Plan and Environmental Impact Statement. The public will have the opportunity to review the Calypso Trail Supplement to the Big Dry Resource Management Plan and Environmental Impact Statement through a protest to BLM's Director. Any person who participated in the planning process and has an interest which is or may be adversely affected may protest the plan for the Calypso Trail. After resolution of any protests, a record of decision will be issued regarding Calypso Trail.

#### LOCATION OF PLANNING AREA

The planning area encompasses BLM-administered public lands in 13 counties in eastern Montana: Carter, Custer, Daniels,

Dawson, Fallon, Garfield, McCone, Prairie, Richland, Roosevelt, Rosebud, Sheridan, and Wibaux. The public lands within the Big Dry Resource Area excluded from this resource management plan are the Charles M. Russell National Wildlife Refuge and the Medicine Lake

National Wildlife Refuge managed by the U.S. Fish and Wildlife Service; and the lands withdrawn for the Fort Keogh Livestock and Range Research Station managed by the U.S. Department of Agriculture. Other lands excluded are the Fort Peck Indian Reservation, managed by the Bureau of Indian Affairs and the Fort Peck Tribes in Valley County.

#### THE PLANNING SYSTEM

Development of an approved resource management plan occurs within the framework of the BLM planning system. The planning system is divided into three distinct tiers: policy planning, land use planning and activity planning. The completion of this approved resource management plan along with the previously completed steps in the land use planning process: the Draft Big Dry Resource Management Plan and Environmental Impact Statement (February 1993), and the 1995 Proposed Big Dry Resource Management Plan and Final Environmental Impact Statement (February 1995), satisfies the requirements for the land use planning tier of the Bureau planning system.

#### PUBLIC PARTICIPATION

The Big Dry Resource Management Plan and Environmental Impact Statement was prepared by an interdisciplinary team of specialists from the Big Dry and Powder River resource areas, the Miles City District Office and the Montana State Office of the BLM. Reviews for adequacy and consistency were provided by the district and state office staffs.

Consultation, coordination and public involvement have occurred throughout the process through scoping meetings, informal meetings, individual contacts, newspaper releases, and *Federal Register* notices.

Preparation of the document began in the fall of 1989. Data was used from inventories before that time, from information received from the public and other agencies, and knowledge of the resource area specialists.

A public participation plan was prepared to provide management and team guidance for developing the resource management plan and to insure public involvement during the entire process. During scoping of the plan, formal and informal public input was encouraged and sought after.

Federal Register notices were published on October 3, 1989, and May 3, 1990, informing the public of BLM's intent to plan, calling for coal information and area of critical environmental concern identification, and announcing the notice of availability of the planning criteria.

Several news releases were published in local papers. The releases announced the beginning of the plan, encouraged public involvement, and the availability of planning criteria.

Brochures were mailed to over 1,000 individuals, groups and agencies in December 1989 notifying the public of the expected issues and upcoming public scoping meetings. Brochures were also mailed in April 1990 summarizing the comments received from the public scoping meetings.

Public scoping meetings were held in nine towns in the planning area with a total attendance of 214 people. Individual meetings were held with commissioners in 10 counties; the Assiniboine, Sioux and Northern Cheyenne Native American tribes; and special interest groups. A total of 64 written responses were received after the public scoping meetings.

As part of the analysis process, a telephone interview was conducted with 100 people representing the full range of resource interests in the planning area. The results of these interviews and all other public involvement were used during selection of the preferred alternative.

In February 1993, approximately 1,500 copies of the Draft Big Dry Resource Management Plan and Environmental Impact Statement were distributed to the public at a cost of \$25,000. A Federal Register notice was published March 19, 1993, beginning the comment period on the Draft Big Dry Resource Management Plan and Environmental Impact Statement. That comment period ended June 18, 1993. A Federal Register notice asking for comments on two newly proposed areas of critical environmental concern was published November 26, 1993, ending January 25, 1994.

Public meetings were held to gather comments on the Draft Big Dry Resource Management Plan and Environmental Impact Statement (1993) at nine locations in eastern Montana: Wolf Point, Sidney, Jordan, Circle, Glendive, Baker, Terry, Forsyth, and Miles City. A total of 170 letters were received on the Draft Big Dry Resource Management Plan and Environmental Impact Statement (1993), and two letters were received on the newly proposed areas of critical environmental concern.

As required by Section 7 of the Endangered Species Act, BLM submitted a biological assessment to the U.S. Fish and Wildlife Service. This document defined potential impacts to threatened and endangered species as a result of management actions approved in this resource management plan. In their letter received July 21, 1994, the U.S. Fish and Wildlife Service stated

"Based on information in the July 14, 1994 biological assessment for the Big Dry Resource Management plan (we) concur with the "may affect - beneficial" finding for the piping plover and with the "is not likely to adversely affect" finding for bald eagle, whooping crane, peregrine falcon, least tern, black-footed ferret, and pallid sturgeon" (see Wildlife appendix).

After considering and analyzing the comments, the 1995 Proposed Big Dry Resource Management Plan and Final Environmental Impact Statement was prepared for the public. Prior to issuance, BLM sent a letter to the mailing list asking the public if they would like a copy of the entire final document, or a Summary of decisions that had changed between the Draft Big Dry Resource Management Plan and Environmental Impact Statement (1993) and the 1995 Proposed Big Dry Resource Management Plan and Final Environmental Impact Statement. In February 1995, a total of 400 copies of the Summary and 1995 Proposed Big Dry Resource Management Plan and Final Environmental Impact Statement were made available to the public at a cost of \$13,000. The Director of BLM received 13 protests by the April 17 deadline on the following: the Fallon County landfill; the open off-road vehicle area near Glendive; noxious weed management; prairie dog management; Ash Creek Divide ACEC; public lands considered for transfer to the Montana Department of Fish, Wildlife and Parks for Makoshika State Park through the Recreation and Public Purposes Act; and the proposed closure of Calypso Trail to motorized vehicles. Further planning was needed before approving the decision for Calypso Trail and a separate Record of Decision will be made available for that decision. The remaining protests did not result in any changes to the resource management plan.

# IMPLEMENTING AND MONITORING DECISIONS

Decisions in this plan will be implemented over a period of years and must be tied directly to the BLM budgeting process. Funding levels can affect the timing and implementation of management actions and project proposals, but will not affect the decisions made under this resource management plan. An implementation schedule will be developed to provide for the systematic accomplishment of decisions in the approved resource management plan.

Monitoring will be conducted to evaluate the continuing effectiveness of the decisions in this plan. Monitoring will provide the needed information to determine if the plan is meeting the stated goals and objectives including: if the management prescription is fulfilling the purpose for which it was designed; if predictions of impacts were accurate; to reveal unanticipated impacts, including those off-site; if mitigation measures are satisfactory and effective; if threshold levels have been met or exceeded; to provide for continuing evaluation of consistency with federal, state, and local government and Indian tribes; and to determine the rate and degree to which the plan is being implemented.

# MAINTAINING AND AMENDING DECISIONS

Decisions in this plan will be maintained to reflect minor changes

in information. Maintenance is limited to refining or further clarifying a plan decision and cannot expand the scope of the decision nor change the terms nor conditions of the decision Maintenance will be documented in supporting records. A plan amendment may become necessary if major changes are needed or to consider a proposal or action that is not in conformance with the plan. Plan amendments are accomplished with public input and environmental analyses.

# ALTERNATIVES INCLUDING THE PROPOSED ACTION

The following four management alternatives were considered in the development of the plan. Each alternative was described and analyzed in the Draft Big Dry Resource Management Plan and Environmental Impact Statement (1993) and the 1995 Proposed Big Dry Resource Management Plan and Final Environmental Impact Statement.

Alternative A, the "no action" alternative continues present management direction. No special management areas are designated and accessibility and availability to resources remains the same.

Alternative B, the "protection" alternative presents management actions that designate special management areas with restrictive management actions, reducing resource accessibility and availability.

Alternative C, the "development" alternative, presents management actions designating special management areas while allowing more resource accessibility and availability.

Alternative D is the approved alternative. This alternative presents management actions that designate special management areas. It allows accessibility and availability to resources when no significant impacts are anticipated.

# ENVIRONMENTALLY PREFERRED ALTERATIVE

Alternative B is the environmentally preferred alternative, providing the greatest protection from surface-disturbing activities. This is followed closely by the approved alternative, Alternative D, in providing environmental protection. Rather than eliminating uses, special management tools are used to provide environmental protection while allowing use to occur.

#### MANAGEMENT CONSIDERATION

Decisions were based on the following rationale and factors.

Private property rights were to be respected. The management actions in this plan apply to BLM-administered lands and minerals only.

Baseline social and economic data were compiled from existing published sources, and a study of local economic and social characteristics. Management decisions considered demographic and economic trends related to current and future demands for public resources. Public perceptions and attitudes of BLM-administered resources were also considered.

Standard operating procedures were applied, as appropriate, to meet resource management goals. In some cases, more specific stipulations were used to further protect the resource.

The BLM followed program guidance including the BLM's Washington Office 1986 Supplemental Program Guidance (BLM Manual 1620-1625), the Missouri Breaks Grazing Environmental Statement Final (USDI, BLM 1979), the Prairie Potholes Environmental Impact Statement Vegetation Allocation Final (USDI, BLM 1981), the Big Dry Environmental Impact Statement Vegetation Allocation (USDI, BLM 1982), and other guidance referred to below.

## RESOURCE MANAGEMENT PLAN

The following decisions will guide future management of land and minerals administered by the BLM within the Big Dry Resource Area. Also discussed are monitoring and mitigation measures. Decisions found in the Appendixes of the 1995 Proposed Big Dry Resource Management Plan and Final Environmental Impact Statement and the following resource management decisions constitute the resource management plan for the Big Dry Resource Area. The rationale for selecting Alternative D, the preferred alternative, was based on public comments from scoping meetings, public comments on the Draft Big Dry Resource Management Plan and Environmental Impact Statement (1993), current regulations, guidance, laws, current management policy, and the analysis of each alternative. The selection parameters used in selecting the approved alternative were:

Decisions would adhere to the goals and objectives established in the Planning Criteria.

Decisions would be implementable and enforceable.

Decisions would be consistent with BLM's multiple- use mission.

Decisions would reflect and endeavor to be consistent with efforts to improve eastern Montana's economy.

Decisions would emphasize Recreation 2000, Wildlife 2000, Range of Our Vision, and riparian/wetland management.

Resource allocations would be based on productivity and capability of lands and resources.

#### **AIR QUALITY**

The objectives for air resource management are to maintain or improve air quality in the short and long term. Standard operating procedures will limit unnecessary emissions from existing and new point or nonpoint sources and will prevent significant deterioration

of air quality in Class I areas. The Class II air quality areas allow deterioration associated with moderate development and population growth. National and state air quality standards will be met (see table 1). No actions are anticipated in any designated nonattainment area.

The BLM will conform with provisions of state regulations and implementation plans during prescribed burning as specified in the "9211-Fire Planning" section of the BLM Manual or when conducting other activities that may impact air quality. Project specific air quality impact analyses will be conducted as necessary to demonstrate compliance.

Administrative actions on public lands will conform with the air quality classification for that specific area and will not impact downwind Class I areas.

#### **Rationale**

Under the requirements of the Clean Air Act, as amended (1979), federal agencies must abide by national air quality standards, and support provisions of state regulations.

#### **CULTURAL RESOURCES**

The primary objectives are to manage the cultural resources under BLM jurisdiction through a system of identification, evaluation, interpretation, utilization, and reduction of conflict between cultural and other resources. The BLM has defined three categories to manage significant cultural properties. These categories are information potential, public values, and conservation for future use.

Cultural resources which contain significant information on prehistory or history of the planning area will be managed for their information potential. These are cultural properties that consist of artifacts and features that have the potential to yield important information.

Cultural resources that possess sociocultural, educational, and recreational attributes will be managed for their public value. These include cultural resources associated with Native American traditional lifeways values, and prehistoric or historic cultural properties which exhibit interpretive or recreational potential. Managing cultural properties used by Native Americans will focus on avoiding uses incompatible with traditional values.

Special or unique cultural resources will be managed under the conservation objective. Included here are cultural properties that contain sensitive prehistoric religious features such as medicine wheels or burials; cultural properties that are of a nature that would not permit current archeological technology to adequately investigate the property; and cultural properties which are rare in the planning area.

Except for those actions identified in the BLM's Memorandum of Understanding with the Montana State Historic Preservation Office, the BLM conducts cultural resource inventories for lands

that include surface disturbance as a part of the action. There are three classes of inventory (BLM Manual 8100).

**Class I** inventories are **reviews of existing cultural data** from resource inventory files maintained by the BLM, the Montana State Historic Preservation Office, professional literature, and other sources.

In **Class II** inventories, a **sampling or percentage of the area** is investigated for cultural resources. The results are projected for the entire land area. Class II inventories can be used to develop predictive models.

Class III inventories consist of an on-the-ground investigation of a specific area for cultural resources. This inventory results in the maximum identification of cultural resources. Class III inventories are usually required before surface-disturbing actions authorized by BLM. Class III inventories are required before disposal actions.

The BLM evaluates the cultural resources identified during inventories in consultation with the State Historic Preservation Office to determine if the resources are eligible for inclusion on the National Register of Historic Places. BLM's evaluation guidelines (BLM Manual 8143, appendix 7) supplement the National Register of Historic Places criteria for evaluation (36 CFR 60.4) and provide consistency across the state.

Mitigation of impacts to cultural resources could include exchanging land so significant cultural resources are acquired. Other mitigation measures include site avoidance and data recovery (including excavation). Avoidance of the site area is the preferred mitigation measure. Consultation with the State Historic Preservation Office and the Advisory Council on Historic Preservation is required when activities are expected to affect significant cultural resources.

In emergency situations, 36 CFR Part 800.12 contains provisions for waiving Section 106 of the National Historic Preservation Act from compliance regulations. The State Historic Preservation Office must be notified within seven days after emergency procedures have been invoked.

After issuance of the Record of Decision, a cultural resource management plan will be prepared for the planning area. The cultural resource management plan will establish management objectives and prescriptions for cultural resources in the area. This plan, in addition to allocating cultural resources to specific uses, will guide and focus active management of the planning area's cultural resources. During the life of the resource management plan, cultural resources will be managed according to recommendations made in the Big Dry Resource Area Cultural Resource Management Plan. Management objectives for significant cultural resource values will remain unchanged under all alternatives addressed in this resource management plan.

The Big Dry Cultural Resource Management Plan will focus special management interest and attention on certain classes of cultural sites or individual properties as they may lend themselves

# TABLE 1 NATIONAL AND STATE AIR QUALITY STANDARDS

Pollutant	Federal Primary Standard	Federal Secondary Standard	Montana Standard	
Inhalable particulates (PM-10) <sup>+</sup>	$50 \ \mu \text{g/m}^3$ annual average $150 \ \mu \text{g/m}^3$ 24-hr average*	$50 \ \mu \text{g/m}^3$ annual average $150 \ \mu \text{g/m}^3$ 24-hr average*	$50 \ \mu \text{g/m}^3$ annual average $150 \ \mu \text{g/m}^3$ 24-hr average*	
Sulfur Dioxide	0.03 ppm annual average 0.14 ppm 24-hr average*	0.5 ppm 3-hr average*	0.02 ppm annual average 0.10 ppm 24-hr average*	
Carbon Monoxide	9 ppm 8-hr average* 35 ppm 1-hr average*	9 ppm 8-hr average* 35 ppm 1-hr average*	0.50 ppm 1-hr average** 35 ppm 1-hr average*	
Nitrogen Dioxide	0.05 ppm annual average 0.05 ppm annual average		0.05 ppm annual average 0.30 ppm hourly average	
Photochemical Oxidants (ozone)	0.12 ppm 1-hr average* 0.12 ppm 1-hr average		0.10 ppm hourly average*	
Lead	$1.5~\mu \mathrm{g/m^3}$ calendar quarter average	$1.5 \ \mu \text{g/m}^3$ calendar quarter average	$1.5 \ \mu \text{g/m}^3 \ 90$ -day average	
Foliar Fluoride	None	None	$35 \mu g/m^3$ grazing season average	
Hydrogen Sulfide	None	None	0.05 ppm hourly average*	
Settled Particulate (dustfall)	None	None	10 mg/m <sup>2</sup> 30-day average	
Visibility	None	None	Particle scattering coefficient of 3x10 <sup>-5</sup> /m annual average (PSD Class I areas)	

KEY: PM-10 particulate matter with an aerodynamic diameter less than 10 microns.

mg/m<sup>3</sup> = micrograms pollutant per cubic meter of sampled air.

ppm = parts per million of sampled air.  $\mu$ g/m<sup>2</sup> = milligrams per square meter

PSD = prevention of significant deterioration

NOTES: +Statistical standards based on three years of data.

\*Not to be exceeded more than once per year.

\*\*Not be exceeded more than 18 times a year.

to identified uses and will establish priority management for specific cultural resources. Management of individual properties will be addressed in site specific cultural resource project plans. Management emphasis will be placed on the following categories of sites:

Special emphasis will continue to be focused on bison kill sites. These sites will be managed to facilitate scientific and conservation use.

In the planning area, stone ring sites are most prevalent near and north of the Missouri River. A study will be conducted to sample sites of this type for eligibility to the National Register of Historic Places and possible special designation.

Sites with possible traditional religious values, such as medicine wheel sites, will be identified and managed for preservation and possible sociocultural use.

Management will focus on the identification of ethnographic period sites. These would include early explorer, i.e. Lewis and Clark related sites and fur trade era sites. Sites with increasing public interest are Indian war period sites, including the Powder River Depot.

Cultural material scatters will be examined for their information potential.

The Cherry Creek archeological complex of sites will be protected and managed for scientific uses. Cultural sites in this complex will be treated as a unit.

Attempts will be made to identify Lewis and Clark campsites within the planning area along the Missouri and Yellowstone rivers. Future plans may include interpretation and other uses for these sites.

Identification of homestead period sites will continue with possible interpretation of a representative sample.

Five cultural sites will be designated areas of critical environmental concern on the following public surface acres (see ACEC appendix and map 2): Hoe (144 acres), Powder River Depot (1,386 acres), Big Sheep Mountain (360 acres), Seline (80 acres), and Jordan Bison Kill (160 acres). In these areas of critical environmental concern, locatable minerals will be withdrawn from entry, and mineral mate rial sales and permits will not be allowed. Nonenergy leasable minerals, and coal leasing will be closed. Oil and gas leasing will be allowed with a no surface occupancy stipulation. Geophysical exploration will not be allowed. Livestock grazing will be allowed, except on 171 acres in the Powder River Depot Area of Critical Environmental Concern (for the Powder River Depot Special Recreation Management Area, see map 18). Off-road vehicle use will be limited to the existing roads and trails, and rights-of-way construction will be avoided.

Monitoring will be conducted as described in Table 58 in the Monitoring appendix.

#### **Rationale**

The Big Dry Resource Area contains many important and unique cultural resource sites. Principal authorities for cultural resources are the National Historic Preservation Act of 1966; the Archeological Resources Protection Act of 1979, as amended; the Code of Federal Regulations (36 CFR 800); the American Indian Religious Freedom Act of 1978; and the Native American Grave Protection and Repatriation Act of 1990.

The National Historic Preservation Act identifies and establishes a system for addressing possible impacts to cultural resources resulting from federal actions. Section 106 directs federal agencies to consider the effects of their actions and authorizations on properties included in or eligible for the National Register of Historic Places.

The Archaeological Resources Protection Act establishes definitions, permit requirements, criminal and civil penal ties for unauthorized or attempted unauthorized excavation, removal, damage, alteration or defacement of any archeological resource found on public or Native American lands. In addition, the Act specifies that federal agencies will coordinate with Native Americans before issuing archeological permits that may result in harm to, or destruction of, their religious or cultural sites. The American Indian Religious Freedom Act protects the rights of Native Americans to practice their religions. The Native American Graves Protection and Repatriation Act requires federal agencies to consult with Native American groups for disposition of cultural items or Native American human remains found on public lands or in federal possession. The BLM coordinates with Native American tribes when its actions have the potential to affect their values or religious areas.

Designation of five sites as areas of critical environmental concern will help protect those sites with special management and enhance the values that make the sites significant.

#### **ENGINEERING**

Construction and maintenance of structural improvements for watershed, wildlife, fisheries, recreation and livestock grazing will be allowed when consistent with resource management objectives for the allotments or areas (BLM Manual 9101). An interdisciplinary team of resource specialists will initiate projects and determine their cost, environmental impacts and mitigating measures (see Engineering appendix).

#### Rationale

BLM Manual 9101 requires a feasibility analysis conducted in the field by an interdisciplinary team of resource specialists. This method is more time efficient and provides for better decisions.

#### FIRE MANAGEMENT

Fire management includes both wildfire actions and prescribed fire operations. Fire will be managed in the manner most cost-efficient and responsive to resource management objectives. The resource

objectives identified in this document will provide the guidelines, direction and degree of suppression to be used.

Fire use areas (see maps 3A-B) are designated areas where fuels management activities will benefit the fire suppression program and meet resource management objectives. Prescribed fire (planned and unplanned ignition) will be used throughout the planning area. The objectives are to improve vegetation production, reduce fuel loads, and maintain public safety. On areas identified for fire use, prescriptions will be written in fire management activity plans for planned and unplanned ignitions.

The intensity level for the initial attack on fires is divided into two broad categories. These categories are as follows:

**Intensive Fire Suppression** - The objective of intensive fire suppression is to immediately suppress wildfires using available resources. Wildfires in intensive fire suppression areas shall be suppressed immediately, and can include the use of dozers, motor graders, tractors with plows, air tankers, and firefighting crews.

Conditional Fire Suppression - The intensity level of conditional fire suppression is not predetermined and will vary with the conditions (impending weather forecasts, condition of vegetation, or firefighting forces committed to other fires). Consideration of resource loss, as well as cost will be the basis of management decisions for conditional fire suppression. The areas where conditional suppression techniques will be implemented are:

Hoe, Big Sheep Mountain, Jordan Bison Kill, and Seline cultural sites (see map 2);

Powder River Depot (see map 2 and map 18) and Lewis and Clark National Historic Trail (see maps 31A-D) cultural and recreation areas;

Calypso (see map 15) and Cherry Creek (see map 16) recreation areas;

Hell Creek, Bug Creek, Ash Creek Divide, and Sand Arroyo paleontological areas (see map 11);

Smoky Butte (see map 14);

piping plover (see map 27) and black-footed ferret (see map 23) wildlife sites; and

riparian/wetland areas.

The guidelines for fire rehabilitation in the planning area are:

Hand and dozer line berms will be rolled back, feathered out and blended in with the surrounding terrain.

Surface disturbances on slopes greater than 10 percent will have angular water bars constructed perpendicular to the slope at intervals no less than 100 feet apart.

Fire-killed trees that are determined to be a hazard to the user

public will be felled and cut into firewood lengths. Tree stumps along roads or trails will be cut level to the ground to eliminate hazards to vehicles.

Fires greater than 25 acres will be analyzed by a resource area advisor and fire staff for possible rehabilitation needs.

BLM fire reports on fires greater than 25 acres will be accompanied by a fire rehabilitation report. This report can simply state that no rehabilitation work is required, or it can be as comprehensive as needed to assess environmental impacts, mitigation measures, and monitoring plans to measure success.

#### Rationale

Public lands are designated for intensive fire suppression in order to protect areas with (1) large amounts of intermingled or adjacent private or state lands, and (2) high values-at-risk (items of human construction), high-value wildlife habitat, historic sites, or other resources. In areas designated conditional fire suppression, management actions restrict intensive fire suppression techniques, such as committing heavy equipment, in order to minimize cost or damage to a resource.

#### **FORESTRY**

Forest lands in the planning area with 10 percent or more canopy cover per acre are managed for the enhancement of other resources, not for the production of forest products or sawtimber.

Wood product sales for posts and poles, Christmas trees, and firewood will be allowed only in the Knowlton, Pine Unit, and Missouri Breaks areas (see maps 4A-B). The harvesting of posts and poles is a selective cutting process; the preferred post size is 6 to 8 inches in diameter and 4 to 6 feet in height. Ponderosa pine is used for posts and poles, while juniper is used for posts. This harvesting is conducive to natural regeneration.

For Christmas trees, an area is designated by the authorized officer and individuals are allowed to select a tree. Ponderosa pine and juniper are the most desirable and both regenerate naturally.

Harvesting of firewood is allowed on designated public lands for dead trees, with ponderosa pine being the primary species.

Wildings are live vegetative products sold off of public lands. They are used for landscaping and include yucca, cactus, grasses, pine trees, and willows.

Sales for sawtimber will not be allowed except salvage harvest of ponderosa pine affected by insects, fire, or other natural causes.

Harvest of cottonwood will be allowed on public land only when human safety is a factor, or when disease or insect infestations are threatening cottonwood stands.

Surface disturbance in the limber pine stand in the Terry Badlands (see map 4B) will not be allowed. The only exception will be if

disease or insect infestations threaten the stand making control methods necessary.

#### **Rationale**

Approximately 10 percent of the planning area is forested, and none are classified as commercial. Management direction is to protect and enhance this resource, while providing limited use for the public.

# HAZARDOUS MATERIALS AND WASTE MANAGEMENT

The BLM will minimize future hazardous materials contamination and its associated risks, costs, and liabilities on public lands in authorizing activities. The BLM will protect the health and safety of public land users. No authorizations will be made for solid or hazardous waste disposal facilities on public land.

Prior to the BLM acquiring land through purchase, exchange, or withdrawal relinquishment, the area shall be inventoried for hazardous substances or contamination in accordance with Department of Interior policy. The BLM will not acquire any contaminated real estate except at the direction of Congress, or for good cause with the approval of the Secretary.

A contingency plan has been prepared to direct and coordinate a BLM response to any reported incident involving the accidental or intentional spill or release of potentially hazardous substances on public land. Clean up will be in cooperation with the Montana State Department of Environmental Quality.

#### Rationale

In order to comply with the appropriate state and federal laws, BLM provides management for hazardous materials and waste.

#### **LANDS**

Access is one of the primary considerations in exchanges. Easements will be considered in areas where exchanges cannot be utilized to resolve access conflicts.

Emphasis will be placed on land tenure adjustment and easement acquisition within the planning area. All land exchanges will be based on willing buyer/willing seller. The goal of the lands program will be to consolidate the scattered public lands increasing management efficiency and accessibility. Prior to initiation of any land adjustment actions, consideration will be given to the impact on the affected county's payment in lieu of taxes and consultation with the county government will be sought.

The objective criteria for disposal and retention areas are as follows:

#### **DISPOSAL AREAS**

The public land in the disposal areas (see map 30) consists of small tracts or parcels that are widely scattered, possess limited resource values, and are difficult to manage. BLM's objective is to dispose

of these types of public land in these areas. Disposal will be through sale or exchange consistent with Sections 203 and 206 of the Federal Land Policy and Management Act of 1976.

Exchanges or acquisitions may be considered to acquire desirable tracts within the disposal areas or add to existing public lands within those areas meeting the long-term management objective criteria.

## **Disposal Criteria**

The following criteria will be used to identify parcels for disposal:

- 1. Lands of limited public value.
- 2. Widely scattered parcels which will be difficult for BLM to manage beyond minimal custodial administration and have no significant values.
- 3. Lands with high public values proper for management by other federal agencies, or state, or local government.
- 4. Land which will aid in aggregating or repositioning other public lands or public land resource values to facilitate national, state, and local objectives.

Each parcel identified for sale or exchange will be subject to certain conditions before disposal: hazardous waste, wilderness, wildlife, riparian/wetland evaluations, and cultural and mineral clearances and reports. The results of the evaluations and reports will be included in an environmental analysis. A notice of realty action would be subsequently published. Parcels will be retained if the clearances, reports, or environmental analyses show any resource values worth retaining.

#### RETENTION AREAS

The BLM's long-term objectives for retention areas (see map 30) are to retain and manage the public lands. Specific objectives are to consolidate public land with public access and resource values into units BLM can effectively manage.

Individual tracts or parcels in the retention areas may be disposed or repositioned through sale or exchange when significant management efficiency, greater public values, or other objectives will be met.

#### **ACQUISITION AREAS**

Criteria to be reviewed when considering lands or minerals for acquisition are the following.

#### **General Acquisition Criteria:**

- 1. Facilitate access to areas retained for long-term public use.
- 2. Enhance congressionally designated areas, rivers or trails.
- 3. Enhance designated areas of critical environmental concern.
- 4. Facilitate national, state, and local BLM priorities or mission statement needs.
- 5. Stabilize or enhance local economies or values.
- 6. Enhance the opportunity for new or emerging public land uses or values.

- 7. Secure for the public significant water-related land interest. These interests include lakeshore, riverfront, stream or pond sites.
- 8. Important riparian/wetland areas.
- 9. Acquisition of cultivated lands will be avoided, unless such acquisition is clearly necessary to attain a specific resource goal.

#### **Program Specific Acquisition Criteria:**

**Cultural Resources** - Any cultural site to be acquired should meet the following evaluation standards:

- 1. High research values
- 2. Moderate scarcity.
- 3. Possess some unique values, such as association with an important historic person or high aesthetic value.
- 4. Contribute significantly to interpretive potential cultural resources already in public ownership.

#### **Minerals** -

- 1. Consolidation of mineral estates.
- 2. Acquisition in response to a federal project need, as in the case of a dam project. Criteria for this type of acquisition generally include:
  - a. When the development of a federal project precludes the mineral estate owner from exercising development rights.
  - b. When the exercise of the mineral estate owner's right of development would materially interfere with the federal project.

**Recreation** - Acquire land with the following significant values:

- National values, such as Congressionally designated areas, rivers, or trails.
- 2. State values that enhance recreation trails and waterways or the interstate, state, and multi-county use.
- 3. Local values for extensive use, such as hunting, fishing, off-road vehicle, and snowmobile use.

**Wilderness -** Acquire inholdings within wilderness study areas and within the boundaries of Congressionally designated wilderness areas under BLM administration.

**Wildlife Habitat Management** - Areas for acquisition will be lands of any size with significant wildlife values as defined below:

- 1. Threatened and endangered species.
  - a. Federally listed species.
  - b. Federal candidate species.
  - c. State listed species of special concern.
- 2. Fisheries
- 3. Big game. Important habitat such as crucial winter areas, fawning, calving, and security areas.
- 4. Upland game birds, migratory birds, and waterfowl. Crucial breeding, nesting, resting, roosting, feeding, and wintering habitat areas of complexes.
- 5. Raptors. Existing and potential nesting areas for sensitive

- species or significant nesting complexes for nonsensitive complexes.
- 6. Nongame. Crucial habitat complexes.

#### OTHER LAND ACTIONS

Whenever possible, major rights-of-way will be constructed within or next to existing rights-of-way, such as highways and railroads. Environmentally sensitive areas identified during the grant application examination will be avoided. In areas where rights-of-way are allowed, stipulations from the BLM Manual 2800 will be used to protect resource values.

Land use permits, leases, and easements will be issued on a discretionary basis, consistent with Section 302 of the Federal Land Policy and Management Act of 1976.

Unauthorized uses of public land will be resolved in an expeditious manner. Unauthorized uses include agricultural, occupancy, exclosures, and rights-of-way. Unauthorized users are liable for past rental, plus administrative costs, and costs for rehabilitation of the affected lands.

Table 2 below contains recommendations for the existing withdrawals.

## <sup>1</sup>TABLE 2 WITHDRAWALS

	Acres
Passanan and of for Continuation	
Recommended for Continuation	202.46
International Boundary	293.46
Medicine Lake National Wildlife Refuge	24,508.07
Fox Lake Game Management Area	160.00
Bureau of Sport Fisheries and Wildlife	
Waterfowl Production Area	26.32
Charles M. Russell National Wildlife	
Refuge	290,222.45
Corps of Engineers (Fort Peck)	3,756.11
Fort Keogh Livestock Experiment Station	9,851.56
Total	328,817.97
Revocations of Withdrawals	
Lower Yellowstone Project	858.71
Fort Buford Project	913.60
Public Water Reserve 107 (McCone)	237.53
Milk River Project	36.69
Corps of Engineers (Fort Peck)	206,976.45
Public Water Reserve 107 (Garfield)	160.00
Buffalo Rapids Project (Bureau of Reclamation)	113.53
Total	209,296.51

<sup>&</sup>lt;sup>1</sup>See the Lands appendix for further information on withdrawals.

Rights-of-way construction will be avoided in cultural areas of critical environmental concern (see map 2), in wildlife areas of critical environmental concern (see maps 23 and 27), in Makoshika State Park (see map 17), in the special recreation management areas

(33,110 public sur face acres, see maps 15, 16, and 18) and excluded in the Smoky Butte Area of Critical Environmental Concern (80 public surface acres, see map 14). The Makoshika State Park recreation and public purposes application will be modified to consider transfer of 2,700 public surface acres to the Montana Department of Fish, Wildlife and Parks (see map 17). Fallon County will receive 640 acres of public land by sale for a sanitary landfill (see map 5). Land in T. 13 N., R. 51 E., sec. 32 (640 acres) will be acquired, preferably by exchange, into public ownership for the Cherry Creek Special Recreation Management Area (see map 16). Alternative methods of acquisition will be pursued only after all reasonable exchange proposals had been explored. To ensure no private development below Cherry Creek Dam approximately 200 acres in T. 12 N., R. 51 E., sec. 12 will be acquired through fee title or a conservation easement.

#### Rationale

Public access is a recognized need in the resource area. During the past 10 years, the resource area has improved access by acquiring new access routes through the purchase of easements, land exchanges and negotiation of reciprocal rights-of-ways. Access will continue to improve by acquiring additional access, utilizing purchase of easements, conducting land exchanges, validation of RS 2477 rights- of-ways and reciprocal rights-of-ways.

Public landownership pattern in the resource area is highly fragmented. Land exchanges will be continue to be conducted to improve access and management of the resources.

#### LIVESTOCK GRAZING MANAGEMENT

Management actions include grazing use, grazing activity plans and systems, utilization levels, range improvements, and vegetation treatment. Increases or decreases in grazing preference animal unit months may be implemented based on resource conditions within an allotment. Temporary adjustments may result, due to conditions such as drought, fire, flood, or insect infestation. Long-term adjustments are based on monitoring data that supports changes in grazing preference. These adjustments will be consistent with 43 CFR 4110.3 to 4110.3-3 and the Montana Drought Policy.

Coordinated activity plans and allotment management plans are used to develop grazing management and multiple-use objectives, such as managing 80 percent of the uplands in late seral to potential natural community or in desired plant community, and 75 percent of the riparian areas in proper functioning condition by 1997. The Livestock appendix lists allotments with proposed allotment management plans, allotments with "I" category allotment management plans, the remaining "I" category allotments, and the status of existing allotment management plans. BLM will take immediate action to resolve the problems on "I" category allotments. The areas' ability to respond to these management actions will vary: utilization objectives may be met within 1 to 3 years, riparian objectives may be met within 3 to 7 years, and ecological status or desired plant community objectives may be met within 5 to 15 years. Coordinated activity plans and allotment management plans are used to develop grazing management and multiple-use objectives, such as managing 80 percent of the uplands in late seral to potential natural community or in desired plant community, and 75 percent of the riparian areas in proper functioning condition by 1997. The Livestock appendix lists allotments with proposed allotment management plans, allotments with "I" category allotment management plans, the remaining "I" category allotments, and the status of existing allotment management plans. BLM will take immediate action to resolve the problems on "I" category allotments. The areas' ability to respond to these management actions will vary: utilization objectives may be met within 1 to 3 years, riparian objectives may be met within 3 to 7 years, and ecological status or desired plant community objectives may be met within 5 to 15 years. RMP amendment August 1997: The Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Montana, North Dakota, and South Dakota approves the following management for the Miles City Field Office Area.

If livestock grazing is preventing achievement of standards, then guidelines would be applied through terms and conditions. If standards are not being met due to conditions that are not related to livestock grazing, the grazing management may not need to be adjusted. Terms and conditions are site specific. They are determined by an interdisciplinary team in consultation with permittees and interested parties for each individual allotment.

Standard 1:Uplands are in proper functioning condition.

Standard 2: Riparian areas and wetlands are in proper functioning condition.

Standard 3: Water quality meets Montana state standards.

Standard 4: Air quality meets Montana state standards.

Standard 5: Habitats are provided for healthy, productive, and diverse native plant and animal populations and communities. Habitats are improved or maintained for special status species (federally threatened, endangered, candidate or Montana species of special concern).

Guideline 1:Grazing is managed to maintain the proper balance between soils, water and vegetation over time.

Guideline 2: Manage grazing to maintain watershed vegetation, biodiversity, and floodplain function.

Guideline 3: Identify pastures and allotments based on their sensitivity and suitability for livestock grazing.

Guideline 4: Ensure long-term resource capabilities can be sustained.

Guideline 5: Frequency of grazing and extent of defoliations will be managed to promote desired plants and plant communities, based on plant growth.

Guideline 6: Monitoring.

Guideline 7: Development of projects affecting water shall be

designed to protect ecological functions and processes of those sites.

Guideline 8: Locate new facilities away from riparian/wetlands.

Guideline 9: Supplemental salts and minerals should not be placed next to watering locations or in riparian/wetlands.

Guideline 10: Guidelines for noxious weeds refer to "Guidelines for Coordinated Management of Noxious Weeds in the Greater Yellowstone Area."

Guideline 11: Grazing management practices should promote the interaction of the hydrologic cycle, nutrient cycle, and energy flow that will support the soil organisms, plants and animals.

Guideline 12: Utilize management practices for livestock grazing that meet or exceed the Best Management Practices approved by the State of Montana.

Guideline 13: Grazing management practices should maintain or improve habitat for Federal listed threatened, endangered and special status plants and animals.

Guideline 14: Grazing management practices should maintain or promote physical, ecological and biological conditions to sustain native plant and animal communities.

Livestock grazing will be excluded from May 1 through July 15 in the Piping Plover Area of Critical Environmental Concern (5 animals unit months, see map 27). In addition, 558 animal unit months will be excluded in the Cherry Creek (see map 16), Calypso (see map 15), and Powder River Depot (see map 18) special recreation management areas. The sale of 640 public surface acres to Fallon County for a sanitary landfill (see map 5) will cancel 145 animal unit months. The 2,700 public surface acre disposal to Montana Department of Fish, Wildlife and Parks for Makoshika State Park (see map 17) will cancel 150 BLM- administered animal unit months. Grazing will be canceled for coal development (640 to 830 animal unit months on 3,400 to 4,400 acres each year) during the 40-year mine life.

#### Rationale

Management actions are designed to maintain or improve vegetation condition. By emphasizing action on "I" category allotments, BLM will be concentrating first on those areas with unique values that can improve.

Livestock grazing is excluded from May 1 to July 15 in the Piping Plover Area of Critical Environmental Concern in order to protect the piping plover eggs from trampling. Where people are concentrating in small areas and these areas are designated Special Recreation Management Areas, livestock grazing is excluded in order not to detract from the recreational experience. Livestock grazing is canceled in areas where BLM will no longer be administering the livestock grazing.

#### **MINERALS**

#### **COAL**

The planning area is within the Fort Union Coal Region and competitive leasing is reviewed by the Regional Coal Team. At this time, the region is decertified (see BLM Manual H-3420-1) and not subject to regional coal sales. The coal planning process is described in the "Coal" section of the Minerals appendix.

Pending the application of the surface-owner consultation screen, coal will be acceptable for further consideration for leasing or exchange on 580,547 public mineral acres containing 6.18 billion tons of coal (see maps 7A-D).

#### Rationale

This management was selected as it will allow the BLM to comply with the multiple use mandates established by FLPMA and the 43 CFR 1600 regulations governing multiple use planning. It will allow BLM to comply with the Surface Mining Control Reclamation Act and the 43 CFR 3400 regulations established to govern the federal coal management program.

#### LOCATABLE MINERALS

Lands will be withdrawn from entry under the General Mining Law of 1872, as amended, on the cultural (1,802 public mineral acres, see map 2), paleontological (48,713 public mineral acres, see map 11), and Piping Plover (16 public mineral acres, see map 27) areas of critical environmental concern and on the Powder River Depot (see map 18), and Cherry Creek (see map 16) special recreation management areas (2,236 public mineral acres) and Makoshika State Park (6,628 public mineral acres, see map 17). The Smoky Butte Area of Critical Environmental Concern (280 public mineral acres, see map 14) will be withdrawn from locatable mineral entry subject to valid existing rights. If a plan of operations is received, BLM will do a validity examination (see "Locatable Minerals" section in the Minerals appendix).

#### Rationale

Locatable minerals are managed in order to comply with the Mining Law of 1872, as amended. It provides for exploration, discovery, and mining of metallic and certain nonmetallic minerals on federal lands. This law has five elements: (1) discovery of a valuable mineral deposit, (2) location of mining claims, (3) recordation of mining claims, (4) maintenance of mining claims, and (5) mineral patenting. The BLM manages the last three elements.

The management program for locatable minerals is administered under federal regulations (43 CFR 3809) and the Memorandum of Understanding between the Montana Department of State Lands and the BLM (BLM Manual H-3809-1, appendix 1). Minerals acquired by the federal government under the Bankhead Jones Act of 1937 are not subject to the General Mining Law of 1872, as amended; these minerals are leasable. Minerals acquired after the passage of the Federal Land Policy and Management Act of 1976, as amended, are

subject to the General Mining Law.

In order to protect important resource values, the Hoe, Seline, Big Sheep Mountain, Powder River Depot, Hell Creek, Bug Creek, Sand Arroyo, Ash Creek Divide, Smoky Butte and Piping Plover areas of critical environmental concern will be withdrawn from locatable mineral entry, subject to valid existing rights. In order to protect significant recreational values, the Powder River Depot, Cherry Creek, and Lewis and Clark Trail special recreation management areas and Makoshika State Park will also be withdrawn from locatable mineral entry.

#### MINERAL MATERIALS

The BLM responds to the requests for sand and gravel used in road surfacing and maintenance. The BLM issues free use permits and sales contracts for mineral materials where disposal is considered to be in the public interest, while providing for reclamation of mined lands, and preventing undue and unnecessary degradation of nonmineral resources. Mineral materials permits are considered on a case-by-case basis and issued at the discretion of the area manager.

Mineral material sales are valued according to the BLM statewide pricing schedule. Contracts valued at more than \$5,000 require individual appraisals before sale. Environmental documentation for material sales or permits for fewer than 50,000 cubic yards and disturbing fewer than 5 acres may be processed with a Categorical Exclusion Review. Sales or permits more than 50,000 yards or 5 acres require an environmental analysis. A reclamation plan and operating stipulations to protect resources that are not mineral are included in the permit. The site reclamation bond is held by the Montana Department of State Lands. Material sales and permits are monitored for production verification, and for operating and reclamation compliance.

Crucial winter range will be open to mineral material sales (see map 24). Mineral material sales will not be allowed in Makoshika State Park (6,628 public mineral acres, see map 17) according to the Memorandum of Understanding between the BLM, the Montana Department of Fish, Wildlife and Parks, and Dawson County.

Mineral material sales and permits will not be allowed on the following public mineral acres: Smoky Butte (280 acres, see map 14), cultural (1,802 acres, see map 2), paleontological (48,713 acres, see map 11), and wildlife (11,182 acres, see maps 23 and 27) areas of critical environmental concern. Mineral material sales and permits will not be allowed on the Powder River Depot (see map 18), Cherry Creek (see map 16), and Lewis and Clark Trail (see maps 31A-D) special recreation management areas (26,236 public mineral acres) and in the Fallon County sanitary landfill (640 public mineral acres, see map 5).

#### Rationale

Scoria, sand, and gravel are the major mineral materials found in the planing area. Most of the deposits are privately owned. The Mineral Materials Act of 1947, as amended, and the Federal Land Policy and Management Act of 1976 give federal agencies the authority to

manage public lands under the principles of multiple use and sustained yield by regulating the use, occupancy, and development of public lands.

Areas that are closed to permits and sales contain important resource values that would be removed or destroyed if mineral material extraction were to take place. In order to help protect these areas, mineral material sales and permits are not allowed.

## NONENERGY LEASABLE MINERALS

A plan amendment will be required before issuing surface mining leases. Prospecting permits will be available for all lands not withdrawn from mineral leasing in conformance with 43 CFR 3500. The leasing functions of the nonenergy leasable minerals program are prospecting permitting, preference right leasing, and competitive leasing.

Nonenergy leasable minerals will be closed to leasing in the following public mineral acres: cultural (1,802 acres, see map 2), paleontology (48,713 acres, see map 11), recreation (280 acres, see map 14), and wildlife (11,182 acres, see maps 23 and 27) areas of critical environmental concern. Nonenergy leasable mineral leasing will be closed in the Powder River Depot (see map 18), Cherry Creek (see map 16), and Lewis and Clark Trail (see maps 31A-D) special recreation management areas (26,236 public mineral acres), and Makoshika State Park (6,628 public mineral acres, see map 17).

#### **Rationale**

Exploration and development of nonenergy leasable minerals are authorized under the Mineral Leasing Acts of 1920 and 1947, as amended. These minerals include, but are not limited to gypsum, sodium, and potassium.

Areas closed to nonenergy leasable mineral leasing have significant values that would be removed or destroyed if mining were to take place. In order to protect these important values, these areas are closed to leasing.

#### **OIL AND GAS**

Federal oil and gas leasing authority for public lands are found in the Mineral Leasing Act of 1920, as amended; and for acquired lands in the Acquired Lands Leasing Act of 1947, as amended. Leasing of federal oil and gas is affected by other acts such as the National Environmental Policy Act of 1969, the National Historic Preservation Act of 1966, the Federal Land Policy and Management Act of 1976, the Wilderness Act of 1964, the Endangered Species Act of 1973, as amended, and the Federal Onshore Oil and Gas Leasing Reform Act of 1987. Regulations governing federal oil and gas leasing and lease operations are contained in 43 CFR 3100, Geophysical Exploration (43 CFR 3150), Onshore Operating Orders (43 CFR 3164.1), the Makoshika State Park Memorandum of Understanding (located in the Big Dry Resource Area files), and BLM manuals and instruction memorandums.

A lease grants the right to explore, extract, remove, and dispose of

oil and gas deposits that may be found on the leased lands. The lessee may exercise the rights conveyed by the lease, subject to lease terms and any lease stipulations (modifications of the lease), and permit approval requirements. When geophysical exploration is allowed, it will follow the procedures and regulations discussed in the "Oil and Gas" section of the Minerals appendix.

Terms and conditions for existing oil and gas leases (valid existing rights) cannot be changed by the decisions in this document until the lease expires. When the lease expires, the area will be subject to the decisions reached in this document.

Unavailable lands under the administration of the BLM will be leased only if a state or fee well is completed within the same spacing unit. These lands will be leased with a no surface occupancy and no subsurface occupancy stipulation with no waiver, modification or exception provisions. There will be no exploration or development (drilling or production) within the unavailable or unleased lands and no additional exploration or development adjacent to these lands as a consequence of lease issuance. After issuance of a lease, the lease will be committed to a communitization agreement and the United States will then receive revenue in proportion to its acreage interest as it bears to the entire acreage interest committed to the agreement.

Areas where oil and gas development could coexist with other resources uses will be open to leasing, with or without stipulations. Stipulations are a part of the lease only when environmental and planning records show the need for them. Three types of stipulations describe how lease rights are modified: no surface occupancy, timing limitation (seasonal restriction), and controlled surface use. (For descriptions see "Leasing Process" in the "Oil and Gas" section of the Minerals appendix.)

Stipulations may be changed by application of waivers, exceptions, or modifications. The decision whether to grant waivers, exceptions, or modifications generally occurs during the Application for Permit to Drill approval process. If the authorized officer determines the change to be major or significant, the proposed action will be subject to a 30- day public review period.

<u>Waivers</u> are a permanent exemption from a lease stipulation. This occurs when the resource does not require the protection of stipulation. For example, a waiver will be granted to an area stipulated for steep slopes if the authorized officer determines that none of the leasehold includes slopes over 30 percent.

Exceptions are granted on a case-by-case basis. Each time the lessee applies for an exception, the resource objective of the stipulation must be met. An example of an exception is the granting of access into crucial winter range before the end of the period specified by the timing stipulation; in this plan the period from December 1 though March 31. If an open winter has occurred and the winter range is no longer being used before March 31, an exception might be granted for entry before the time period has elapsed. The decision is granted only for the year in question. In the following year an exception will have to be evaluated on current seasonal conditions and use.

<u>Modifications</u> are fundamental changes to the provisions of a lease stipulation either temporarily or for the term of the lease. A specific

example of a modification to a stipulation in this plan is in an area of active coal mining. There is a no surface occupancy stipulation on coal mines with approved mine plans. When an area has been mined, there is no longer any need to restrict access for oil and gas development. The boundary of the coal mine area which is stipulated will be modified to allow oil and gas development to occur where the coal has been removed.

If the lease is changed by a waiver or permanent modification, BLM will issue a written notice to the lessee and any other affected lessees. The notification to lessees is titled "Notice to Amend the Lease Terms."

Additional information can be provided to the lessee in the form of a lease notice. This notice does not place restrictions on lease operations, but does provide information about applicable laws and regulations, and the requirements for additional information to be supplied by the lessee.

After lease issuance, the lessee may conduct lease operations with an approved permit (see "Conditions of Approval" in the "Oil and Gas" section of the Minerals appendix). Proposed drilling and associated activities must be approved before beginning operations. The operator must file an Application for Permit to Drill or Sundry Notice that must be approved according to (1) lease stipulations, (2) Onshore Oil and Gas Orders, and (3) regulations and laws (see "Permitting" in the "Oil and Gas" section of the Minerals appendix).

On Bureau of Reclamation lands, stipulations that are recommended by the Bureau of Reclamation will be used (see "Oil and Gas" section in the Minerals appendix).

Oil and gas leasing will be allowed in Makoshika State Park (see map 17) in accordance with the Memorandum of Understanding between the BLM, the Montana Department of Fish, Wildlife and Parks, and Dawson County. Oil and gas leasing will not be allowed (nondiscretionary) in the Fox Lake Game Management area (160 acres). For additional discussions on oil and gas recovery, regulations, lease stipulations, and permit processing see the "Oil and Gas" section in the Minerals appendix (see maps 32A-D). Table 3 below presents the lease stipulations and the acreage affected by each stipulation.

RMP Amendment August 1999: Makoshika Amendment. The MOU for Makoshika State Park regarding oil and gas leasing and development decisions was changed to allow oil and gas leasing on BLM-administered lands within the Park with a "no surface occupancy" stipulation for oil and gas. The new MOU also includes the Montana Department of Natural Resources and Conservation.

Monitoring will be conducted as described in Table 58 of the Monitoring appendix.

#### **Rationale**

The BLM planning process determines availability of federal lands for oil and gas leasing where BLM is the surface management agency. For federal oil and gas lands where the surface is managed by another federal agency such as the U.S. Fish and Wildlife Service

TABLE 3
SUMMARY OF OIL AND GAS SPECIAL STIPULATIONS, LEASE TERMS AND WITHDRAWALS

	High Development Potential Acres	Moderate Development Potential Acres	Total Mineral Acres Stipulated	Acres With Lease Terms	Acres Closed To Leasing
<sup>1</sup> Special Stipulations RMP Amendment August 1999: Th 5,403 BLM-administered oil and g					
No Surface Occupancy					
Cultural ACECs	80	1,722	1,802	0	0
Special recreation					
management areas	4,500	21,736	26,236	0	0
Fallon County sanitary landfill	640	0	640	0	0
Smoky Butte ACEC	0	280	280	0	0
Paleontological ACECs	0	48,713	48,713	0	0
Riparian/wetlands	1,660	3,690	5,350	0	0
Piping Plover ACEC	16	0	16	0	0
Bald eagle nests	0	515	515	0	0
Ferruginous hawk nests	0	466	466	0	0
Grouse leks and nests	945	43,358	44,303	0	0
Least tern habitat	4,443	12,689	17,132	0	0
Limber pine area	0	3,019	3,019	0	0
Paleontological localities	0	120	120	0	0
Peregrine falcon nests	0	0	0	0	0
VRM I	3,921	80,122	84,043	0	0
Controlled Surface Use					
Steep slopes	33,422	685,680	719,102	0	0
Black-footed Ferret ACEC and	,	,	, .		
potential black-footed ferret habita	at 0	5,164	5,164	0	0
RMP Amendment August 1999: Th		*		onger any control	led surface use
stipulations in the Park. See chang					v
Makoshika State Park	0	6,628	6,628	0	0
Prairie dog habitat	0	30,637	30,637	0	0
VRM II	26,078	380,944	407,022	0	0
Timing Restrictions					
Crucial winter ranges	69,373	631,606	700,979	0	0
Elk spring calving	0	0	0	0	0
Grouse nesting zone	5,634	398,856	404,490	0	0
Raptor nests	1,039	43,180	44,219	0	0
Lease Terms					
RMP Amendment August 1999: Th approximately 1,225 BLM-adminis					ease terms on
Potential prairie dog habitat	on on and gus ac	Combrate inte I air	Treviews tite 111 Cu	c, concern.	
for the black-footed ferret	0	56,839	0	56,839	0
117241 J 1					
Withdrawals (nondiscretionary) Fox Lake Game					
	Ω	160	Ω	Ω	160
Management Area	0	100	0	0	100

<sup>&</sup>lt;sup>1</sup>See "Oil and Gas" in the Minerals appendix for descriptions.

or the Bureau of Reclamation, the BLM will consult with that agency before issuing leases. Oil and gas lands owned by Native Americans or Tribes are evaluated by the Bureau of Indian Affairs with subsequent leases issued by the Bureau of Indian Affairs. In areas where oil and gas development may conflict with other resources, the areas may be closed to leasing. The regulations at part 43 CFR 3100.0-3(d); the Secretary's general authority to prevent the waste and dissipation of public property (43 U.S.C. 1457(12) (1982); and the Attorney General's Opinion of April 2, 1941 (Vol. 40 Op. Atty. Gen 41) allow the BLM to lease lands that are otherwise unavailable for leasing if oil and gas is being drained from such lands. If the unavailable lands are under the jurisdiction of another agency, leasing of such lands will only occur if the affected surface management agency agrees to lease issuance.

To provide a greater degree of protection to important resource values, leasing will be allowed with a no surface occupancy, controlled surface use, or timing stipulation.

#### **PALEONTOLOGY**

Surface-disturbing activities are subject to the following requirements. The lessee or operator shall immediately inform the BLM of paleontological resources discovered as a result of operations, and will stop until directed to proceed by the BLM. An on-the-ground survey for fossil material will be conducted by the BLM and the operator will be notified where and when to continue operations. If the fossil material is significant, the activity will be moved so the locality will not be disturbed. If the activity cannot be moved, mitigation measures will be completed. This may be simply collecting the fossil(s) and associated data immediately, or it may require a major excavation of the site.

Paleontological collecting permits are issued to institutions with the proper facilities for preparation, study, and storage of fossil material. The researchers in charge of the field work must be qualified to remove and handle the fossil material. The fossils and associated data are to remain available to researchers for study and for public display. A report of the results of the field work must be filed with the BLM. Excavations to recover paleontological materials or data will be backfilled. Topsoil is usually removed and stockpiled separately at the beginning of an excavation. It is spread over the backfilled material during reclamation. The area would be recontoured to match the original landscape, and reseeded with native species. On slopes exceeding 30 percent, water bars (water diversions) or other methods to reduce erosion would be constructed.

Surface-disturbing activities will not be allowed on the Garbani, Harbicht Hill, and Flat Creek paleontological localities.

Management actions occurring within the Judith River Formation, Hell Creek Formation, and the Tullock Member of the Fort Union Formation will be analyzed for impacts to the paleontological resource (see maps 12A-D).

Four paleontological areas: the Hell Creek (19,169 public surface acres), Bug Creek (3,840 public surface acres), Sand Arroyo (9,056 public surface acres), and Ash Creek Divide (7,931 public surface acres) will be designated areas of critical environmental concern (see

ACEC appendix and map 11). These areas will be withdrawn from locatable mineral entry and closed to mineral material sales and permits, nonenergy leasable mineral leasing, and coal leasing. Oil and gas leasing will be allowed with a no surface occupancy stipulation. Geophysical exploration will not be allowed. Off-road vehicle use will be limited to the existing roads and trails, and rights-of-way construction will be allowed. Livestock grazing will be allowed on paleontological localities and on the Ash Creek Divide, Bug Creek, Sand Arroyo, and Hell Creek areas of critical environmental concern.

Monitoring will be conducted as described in Table 58 of the Monitoring appendix.

#### Rationale

To help protect their special values, BLM is designating four paleontological areas of critical environmental concern and will not allow surface disturbing activities in the Garbani, Harbicht Hill and Flat Creek localities.

#### RECREATION

In addition to existing policies and guidance, recreation management will follow Recreation 2000: A Strategic Plan (USDI, BLM 1989d) and Recreation 2000Tri-State Strategy (USDI, BLM 1990b). Emphasis is directed toward five goals: (1) budgeting, (2) visitor information, (3) access and land tenure adjustments, (4) facilities, and (5) resource protection.

The Lewis and Clark National Historic Trail will continue to be managed in accordance with the act which established the Trail in 1978 (see maps 31A-D). The Trail will be managed for public use and enjoyment, while preserving the historic and cultural resources that are related to the events that occurred during the Lewis and Clark Expedition. Management objectives will be (1) at a minimum, maintain the existing public land base that adjoins the Yellowstone and Missouri rivers; (2) increase, where appropriate and consistent with this plan, the public land base that adjoins the Yellowstone and Missouri rivers; (3) increase public use and enjoyment opportunities; and (4) maintain an undeveloped visual setting near known expedition campsites.

Any changes in the landscape within view of the Lewis and Clark National Historic Trail will be guided by Class II visual resource management objectives as described in this section. Future management actions will give full consideration to lessening adverse impacts to adjacent private landowners and users, and harmonize with and compliment existing multiple-use plans. Management actions will include acquiring and marking access to the Trail, installing interpretive signs, and developing interpretive brochures.

Priority will be placed on developing partnerships with other federal, state and local agencies, and private entities when the partnership benefits the public. Examples include developing wildlife viewing areas, managing campgrounds, acquiring access to public lands, developing fishing reservoirs and associated facilities, constructing trails and developing informational and interpretive brochures.

Priority will be placed on acquiring legal access to public lands through exchanges and easements. Signing and identifying through signing parcels that are legally accessible and provide important recreation opportunities.

Guides and outfitters and other permitted recreational uses will be authorized according to the Special Recreation Permit Guidelines for Montana, North and South Dakota (USDI, BLM 1987c). Determination of maximum allow able use will be according to the criteria in the BLM Manual H-8372-1. Outfitting and guiding will be authorized on a first-come, first-served basis until an area's maximum allowable use is being approached. The affected area's maximum allowable use will be approached when one of the following conditions occur:

user conflicts exist either among commercial outfitters or between the non-guided public and commercial outfitters;

damage to resources from visitor use is considered unacceptable;

enforcement and compliance problems exist; or

conflicts with adjacent landowners exist.

When one of the above conditions is reached, and the conflict cannot be resolved through negotiations with users, the following process will be in effect until an activity plan is completed and the carrying capacity is established:

no new permits for the activity in conflict will be issued for the affected area:

a temporary allocation will be established using criteria such as camp spacing, temporary use areas and day use limitations; and

other types of commercial activities may be authorized if they do not add to the existing conflict.

The activity plan will show desired use levels based on the area's carrying capacity. The plan also will establish the method of distributing commercial use.

The BLM will continue to cooperate with the Montana Department of Fish, Wildlife and Parks and private landowners to improve hunter access. This will involve participation in block management or developing access agreements with private landowners.

Visual resource management classifications (see maps 19A- D) on public land in the planning area are Class I (83,240 acres), Class II (424,492 acres), Class III (11,409 acres), and Class IV (1,184,689 acres). Surface occupancy and use in visual resource management Class I areas applied to public lands will be managed according to Interim Management for Lands Under Wilderness Review (BLM Manual H-8550-1).

Where publicly owned minerals underlie privately owned surface, visual protection measures will be recommended to the private surface owner to be used at their discretion.

To maintain aesthetic values, semipermanent and permanent facilities in visual resource management Class II will require special design. This design will include location, painting, and camouflage to blend with natural surroundings and to meet visual quality objectives.

Class I - The objective of this class is to preserve the existing character of the landscape. The goal of this class is to provide a landscape that appears unaltered by man. This class provides for natural ecological changes. It does not restrain limited management activity, or those activities specifically authorized by the Wilderness Act of 1964 and described in BLM Manual H-8550-1. This is an interim classification until Congress determines which areas are wilderness. Lands designated as wilderness by Congress will continue to be managed under Class I objectives. Lands not designated wilderness will be managed under visual resource management Class II objectives.

**Class II** - The objective is to keep the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the dominant features of the landscape.

**Class III** - The objective is to partially keep the existing character of the landscape. The level of change to the landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the dominant features of the landscape.

Class IV - The objective is to provide for management activities that require major changes of the existing landscape. The level of change to the landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to lessen the impact of these activities through careful location, minimal disturbance, and repeating the basic elements.

The Wilderness Study Areas and areas recommended for wilderness (83,240 public surface acres, see maps 31A-D) will be managed according to the Interim Management for Lands Under Wilderness Review (BLM Manual H-8550-1) until Congress designates areas wilderness. Those areas designated wilderness will be managed according to the Wilderness Act. Those areas not designated wilderness will be managed the same as like adjacent lands. Off-road vehicle use will be limited to the existing roads and trails until Congress decides which areas to designate as wilderness. Those areas designated as wilderness will be closed to off-road vehicle use with exceptions as identified in the Wilderness Act or a future wilderness management plan. The areas Congress decides not to designate as wilderness will remain limited to off-road vehicle use. The one exception will be actions authorized by BLM.

There will be 2,320 public surface acres open to off-road vehicle use to provide recreational opportunities to off-road vehicle users (see map 13 in the "Dear Reader" letter to the public March 2, 1995). In areas open to off-road vehicle use, vehicles will be allowed without restrictions. To protect the vegetation, soil and water resources 1,614,770 public surface acres will be limited off-road

vehicle use, and 80 public surface acres (Smoky Butte, see map 14) closed to off-road vehicle use. No vehicles will be allowed on areas closed, including on the existing roads and trails. Motorized vehicles are not allowed within areas closed to off-road vehicles, except for emergency vehicles, fire suppression and rescue vehicles, BLM operation and maintenance vehicles, other federal, state, or local agency vehicles in the performance of an official duty and other motorized vehicles on official business specifically approved by the authorized officer of the Bureau of Land Management. In limited off-road vehicle use areas, parking or camping will be allowed within 100 yards of a road or trail. Special permits will be required for camps beyond that distance. Vehicle travel off existing roads and trails will be allowed only for authorized or permitted uses. These uses include medical or other emergencies, livestock management practices, geophysical exploration, firewood cutting, travel within active prairie dog colonies, retrieval of big game animals, and snow machines when snow cover is adequate. During particularly severe snow years, it may be necessary to consider limiting or closing some areas containing large numbers of wintering wildlife to snow machines. Special off-road vehicle permits for individuals with disabilities will be issued.

RMP supplement May 1997: The Calypso Trail will remain open to motorized vehicles and off-road travel is limited to the road itself.

Public lands within Makoshika State Park (2,700 acres, see map 17) will not be designated a special recreation management area as these lands will be considered for transfer to the Montana Department of Fish, Wildlife and Parks through the Recreation and Public Purposes Act. Rights-of-way construction will be avoided. Off-road vehicle use will be limited to the existing roads and trails. Locatable minerals will be withdrawn from entry, and nonenergy leasable minerals will be closed to leasing. BLM-administered livestock grazing will be canceled. In Makoshika State Park, mineral material sales and permits, and oil and gas leasing and development will be conducted according to the Memorandum of Understanding between BLM, Montana Department of Fish, Wildlife and Parks, and Dawson County. These lands will be unsuitable for coal development.

Smoky Butte (80 public surface acres, see map 14) will be designated an area of critical environmental concern (see ACEC appendix). Off-road vehicle use will be closed. The area will be withdrawn from locatable mineral entry subject to valid existing rights. Mineral material sales and permits, coal leasing, and nonenergy mineral leasing will be closed. Oil and gas leasing will be allowed with a no surface occupancy stipulation. Geophysical exploration and livestock grazing will be allowed. Rights-of-way construction will not be allowed.

The planning area will be designated as an extensive recreation management area, except for the following 17,098 public surface acres designated as special recreation management areas:

Calypso Special Recreation Management Area (see map 15) is a 69-acre parcel next to the Terry Badlands Wilderness Study Area, along the Yellowstone River. Management objectives include opportunities for camping, picnicking, day hiking, fishing, sightseeing and wildlife viewing. To achieve these objectives, the BLM will develop overnight tent campsites, restrooms, drinking

water, picnic tables and fire rings.

There are no federal minerals in the Calypso Special Recreation Management Area. Livestock grazing will not be allowed. Rights-of-way construction will be avoided. Off- road vehicle use will be limited to the existing roads and trails.

Cherry Creek Special Recreation Management Area (see map 16) will provide additional recreational facilities in southeastern Montana. It will consist of 2,858 public surface acres and a dam with a 50-foot pool depth (see the Recreation appendix for dam specifications). To provide fishing, boating, camping, picnicking and waterfowl hunting, the proposed facility should include overnight recreational vehicle and tent campsites, restrooms, drinking water, boat ramps, picnic tables and fire rings. A separate environmental impact statement will be written to analyze impacts from the proposed dam. Funding for this environmental impact statement and costs for building the dam will require a supplemental appropriation from Congress. If the dam is not constructed, Cherry Creek will not be managed as a special recreation management area and will be managed the same as like adjacent lands.

Livestock grazing, mineral material sales and permits, and geophysical exploration will not be allowed in the Cherry Creek Special Recreation Management Area. Rights-of- way construction will be avoided. Locatable minerals will be withdrawn from entry. Coal, and nonenergy leasable mineral leasing will not be allowed. Oil and gas leasing will be allowed with a no surface occupancy stipulation, and off- road vehicle use will be limited to the existing roads and trails.

Powder River Depot Special Recreation Management Area (see map 18) will provide additional recreational facilities in southeastern Montana. This 171 public surface acre special recreation management area is located with the Powder River Depot Area of Critical Environmental Concern. BLM will manage the special recreation management area with overnight campsites, and a display depicting the history of the area. Management objectives to provide fishing, river access, camping, and picnicking will be met with development of tent camping sites, restrooms, drinking water, boat ramps, picnic tables, and fire rings. Impacts to the Powder River Depot Area of Critical Environmental Concern from recreational developments for the special recreation management area will be mitigated.

Livestock grazing, mineral material sales and permits, and geophysical exploration will not be allowed in the Powder River Depot Special Recreation Management Area. Rights- of-way construction will be avoided. Locatable minerals will be withdrawn from entry. Coal, and nonenergy leasable minerals will be closed to leasing. Oil and gas leasing will be allowed with a no surface occupancy stipulation. Off-road vehicle use will be limited to the existing roads and trails.

Lewis and Clark Trail Special Recreation Management Area (see maps 31A-D) is 14,000 acres of public land along the Missouri and Yellowstone rivers. The Lewis and Clark National Historic Trail lies within this area. BLM will manage the Lewis and Clark National Historic Trail in accordance with the act which established it in 1978. The Lewis and Clark National Historic Trail will be managed for

public use and enjoyment, while preserving the historic and cultural resources that are related to the events that occurred during the Lewis and Clark expedition. Future management actions will give full consideration to lessening adverse impacts to adjacent private landowners and suers, and harmonize with and compliment existing land use plans.

Management objectives in the Lewis and Clark Trail Special Recreation Management Area are to enhance water-based recreation resources while meeting public demand for river access. Facilities will consist primarily of boat ramps, picnic tables and fire rings. Where use exceeds the carrying capacity of the resource, additional facilities such as restrooms and campsites will be constructed. Development will be designed to compliment, rather than compete with, any nearby state, federal, or private facilities. The Calypso (see map 15) and Powder River Depot (see map 18) special recreation management areas are not included within this corridor. Management for those areas is discussed above.

In the Lewis and Clark Trail Special Recreation Management Area, rights-of-way construction will be avoided. Mineral material permits and sales will not be allowed. Locatable mineral entry and livestock grazing will be allowed. Oil and gas leasing will be allowed with a no surface occupancy stipulation. Coal and nonenergy mineral leasing will be closed. Geophysical exploration will be allowed and off-road vehicle use will be limited to the existing roads and trails.

Monitoring will be conducted as described in Table 58 of the Monitoring appendix.

#### **Rationale**

BLM issues Special Recreation Use permits in order to protect resources, control visitor use and provide opportunities for commercial, competitive, noncommercial, noncompetitive, and special recreation uses on public lands. Outfitting and guiding is permitted to help satisfy the public's demand for use in an area.

Visual resource management classifications are made in order to manage lands in a manner which will protect scenic values.

Open off-road vehicle designations are made to provide for public needs or demands. Limited off-road vehicle designations are made to help protect natural resources, and minimize conflicts among various users of the public lands. To help protect the area, the Smoky Butte Area of Critical Environmental Concern is closed to off-road vehicle use.

The Extensive Recreation Management Area is designated to manage the majority of public lands for traditional dispersed recreational use. Special Recreation Management Areas are designated to manage areas where outdoor recreation is a high priority, require a greater recreation investment, and more intensive recreation management is needed.

#### **SOIL AND WATER**

The federal Clean Water Act (Public Law 92-500), section 305(b) and section 106(e)(1), requires each state to submit a biennial report

on surface and ground water quality. The State of Montana's 1992, 305(b) report includes a list of streams considered to be impaired within the Big Dry Resource Area. Many of these streams have limited public lands along their stream reach. Impaired streams that have a significant portion of public lands in the stream's basin are considered critical watersheds (see Soil and Water appendix).

Watershed activity plans, allotment management plans, and habitat management plans will be developed and implemented by consultation, coordination and cooperation with the operator, local and state agencies, other federal agencies, and interest groups. BLM will file water rights with the state of Montana for water-related projects on public land. A data base containing pertinent information will be maintained for water rights held by the BLM. BLM activities conducted will meet Montana water quality standards (see "Water" section in the Monitoring appendix).

BLM will manage the Cherry Creek watershed to improve the water quality by improving the riparian habitat along the channels of the ephemeral and intermittent streams. Riparian management is discussed in the "Vegetation" section. BLM will be involved in the Cherry Creek Water Quality Special Project according to the Memorandum of Understanding between the BLM, Prairie County Conservation District, Agricultural Stabilization and Conservation Service, Prairie County Cooperative State Grazing District, Cooperative Extension Service, Soil Conservation Service, and Montana Department of State Lands. This Memorandum of Understanding is available in the Big Dry Resource Area office.

The BLM objectives on upland areas and along stream bottoms, are to maintain adequate vegetation cover to increase soil productivity and stability. Management objectives include preventing the contamination of soils and water from spills. Vehicle and equipment servicing and refueling activities are conducted away from wet areas and drainages, except where present facilities exist. Proper techniques are used to collect petroleum products, and to clean up spills. The operator must develop a Spill Prevention Control and Countermeasure Plan (40 CFR 112).

Ground water wells, oil and gas, and facilities are to be completed in such a manner as to reduce the potential for contamination or depletion of the ground water aquifer. Wells will be constructed as regulated by the Montana Department of Natural Resources and Conservation, and Department of Health and Environmental Sciences. Protective measures must include, at a minimum, cementing or grouting the annulus of the borehole and grading the land surface to direct surface waters away from the wellbore. Federal oil and gas wells will be plugged according to federal regulations (see "Production and Development" under "Oil and Gas" section in the Minerals appendix).

Surface disturbance on slopes 30 percent or greater will be avoided whenever possible. If the surface-disturbing action cannot be avoided, appropriate mitigation measures will be applied to lessen the impacts to the soil.

The following are reclamation actions to mitigate the impacts to the soil and water resources from surface-disturbing activities:

mulching and nurse crops;

road surfacing (gravel, scoria, or other surface materials); surface water drainage (drop structures, culvert placement, water bars, erosion fabrics, gully plugs, contour furrows, ripping, chiseling, and pitting);

development of seed mixture, site-specific, for revegetation; (example: 3 pounds per acre dryland alfalfa or 2 pounds per acre yellow sweet clover, 2 pounds per acre green needle grass, 4 pounds per acre western wheat grass, 5 pounds per acre slender wheat grass);

topsoil removal, storage and replacement (site specific recommendations of depths);

snow fencing for additional moisture in establishment of vegetation;

proper seedbed preparation, including ripping depth, drill or broadcast seeding, raking and discing;

produced water and mud pit design, including liners, proper compaction, and location away from perennial and ephemeral streams.

Ground water monitoring wells, if necessary;

surface casing installed through the Fox Hills geologic formation to protect domestic ground water sources from possible contamination;

reduced surface disturbance (smaller pad size, joint roads, pipeline rights-of-way, and selection of drill sites requiring least surface disturbance, shorter access roads).

Monitoring will be conducted as described in Table 58 of the Monitoring appendix.

#### Rationale

BLM consults and coordinates with other federal, state, and local agencies as required by the Watershed Protection and Flood Control Act, Clean Water Act, and Office of Management and Budget Circular A-81. Areas are managed in order to stabilize and conserve soils, increase vegetation production and maintain or improve water quality.

#### VEGETATION

The vegetation management objective on public lands is to achieve plant communities with ecological status ranging from late seral to potential natural community within 20 years. Occasionally the desired plant community may have an ecological status less than late seral or potential natural community because of other management objectives taking precedence (see Vegetation appendix).

Land treatments (chemical, fire, biological and mechanical) will

be consistent with the guidelines stated in the Final Vegetation Treatment on BLM Lands in Thirteen Western States (USDI, BLM 1991b), Northwest Area Noxious Weed Program Final Environmental Impact Statement and Supplement (USDI, BLM 1987d), and BLM Manual H-1740-1.

Manual vegetation treatment can be used for establishment of vegetation in riparian areas when other methods are not recommended. Hand planting of willow or cottonwood cuttings (sections of twigs or stems) or seedlings will be allowed in riparian areas.

Prescribed burning is used to enhance growth, and vigor of certain species, and to maintain a specific vegetation community. Prescribed burning will be avoided on highly erodible slopes. Areas will be burned to leave a mosaic pattern, with sagebrush cover if possible. Livestock grazing is delayed for at least one growing season. A two-year delay may be necessary for browse regrowth or when artificial seeding is required. Prescribed burns are carried out according to the procedures in the BLM Manual 9214 and H-9211-1.

Mechanical treatments will be avoided on slopes greater than 15 percent, on highly erodible soils, or in riparian/ wetland areas. Mechanically-treated areas will be rested for two growing seasons (April through September). Undisturbed areas will be left for livestock and wildlife walkways in contour furrowed areas, and waterways will not be disturbed. Mechanical treatments will be consistent with the 1971 Memorandum of Understanding (on file in the Big Dry Resource Area) between the BLM and the Montana Department of Fish, Wildlife and Parks. This Memorandum of Understanding states that the BLM will advise the regional supervisor of the Montana Department of Fish, Wildlife and Parks of any proposed treatments and that the regional supervisor will be given the opportunity to provide comments on these treatments.

Interseeding occurs when desirable species are not present in the treatment area or on highly erodible soils to stabilize the soils. The seed used must be tested for purity and free of noxious weed seeds. When seeding crested wheatgrass, an appropriate forb mix such as alfalfa or sweet clover could be included.

Harvesting of nonnative hay or seed will be authorized when consistent with resource management objectives for the allotments or areas. The BLM has the option to reduce animal unit months during the year the hay is cut if the cutting of hay will result in a reduction of the carrying capacity for the allotment. The operator will be informed of any potential reduction at the time they request prior approval for haying. Harvesting will be restricted in grouse nesting habitat within 2 miles of a lek until June 15. Harvesting will be excluded within ½ mile of an active raptor nest until August 1. BLM will cooperate with county weed boards in the planning area for control efforts directed toward noxious weeds on public lands (see map 21). This cooperation will consist of providing BLM funding, exchanging information, and control efforts by BLM crews to expand county efforts. Cooperation by BLM could be limited because of weed control funding and unavailability of staffing and equipment.

BLM uses integrated pest management for noxious weed control (USDI, BLM 1985, 1987d, 1991b). This is an approach to reduce noxious weed damage to tolerable levels by using predators, parasites, genetically-resistant hosts, environmental modifications, and when necessary and appropriate, chemical pesticides (herbicides). Methods of treatment and acceptable levels of infestation will be described in a site-specific environmental analysis. An acceptable level of infestation may be incorporated into a desired plant community where total eradication is not economically or biologically reasonable.

Weed control on public lands is in cooperation with county weed programs. When county crews are unavailable, BLM crews and equipment may be used. Personnel involved in pesticide application must be trained and a certified licensed applicator must be present. Individuals involved in herbicide applications, or using contaminated tools or equipment will wear protective clothing and equipment (USDI, BLM 1991b, BLM Manual 9011, H-9011-1).

Chemical treatment is designed for reduction of noxious weeds such as leafy spurge and knapweed species. Methods and rates are in the Vegetation Treatment on BLM Lands in Thirteen Western States Final Environmental Impact Statement (USDI, BLM 1991b), the Northwest Area Noxious Weed Control Program Final Environmental Impact Statement (USDI, BLM 1985) and the supplement (USDI, BLM 1987d). Usually, the maximum rates will be used on small isolated infestations or newly introduced noxious weeds. The rates of herbicide application depend on species present, condition of the nontarget vegetation, soil type, water table depth, and other water sources.

When applying herbicides, buffer strips will be provided next to dwellings, domestic water sources, agricultural land, streams, lakes, and ponds. A minimum buffer strip 100-feet wide must be provided for aerial application, 25 feet for vehicle application, and 10 feet for hand application. Deviations will be according to the herbicide label. The herbicide will be applied by hand on each plant within 10 feet of water (USDI, BLM 1991b, BLM Manual H- 9011-1).

Biological weed control methods have been implemented to a limited extent. Grazing by sheep or goats helps to prevent leafy spurge from spreading. The effectiveness of insects is uncertain because an adequate population of insects and the right combination takes time to establish. The BLM will continue to work with agencies, universities and others using insects as a biological control agent.

The BLM contracted in 1992 with the Montana Natural Heritage Program to inventory plant communities. This inventory did not identify any rare plant communities. Species of special concern will be managed in accordance with BLM Manual H-6840. This manual provides guidance for the BLM to manage species of special concern in a manner which will not cause these species to become threatened or endangered. Inventories will continue as needed.

A 50 percent browse utilization level is standard for the planning area, though other levels can be incorporated into the terms and conditions of a grazing permit or lease, or a grazing activity plan. If proper utilization levels are exceeded, adjustments are made in

cooperation with the livestock operator. If an agreement cannot be reached, a decision concerning livestock use will be issued according to 43 CFR 4110.3-2(b) and 43 CFR 4160.

Forage increases resulting from improved grazing management or vegetation treatment will be allocated consistent with the management objectives for the particular allotment or area.

Riparian/wetland objectives are to restore and maintain riparian/wetland areas so 75 percent or more are in proper functioning condition by 1997. All activity plans with riparian/wetland areas will have the same goal as well as specific objectives such as desired plant communities, stream channel conditions, water quality standards, maximum allowable streambank alteration by livestock, mini mum stubble heights of herbaceous plants at the end of the growing season, and a maximum allowable utilization level on woody plants. Management actions to accomplish those objectives include:

Implementation of grazing systems, seasons of use adjustments, water developments, fencing, and livestock management.

Include in activity plans, the amount of seedling, sapling, pole, and mature and dead woody key species on sites with potential for woody species. Describe the desired condition of the areas as well as the desired ecological status.

No trough or tank will be installed in areas containing important riparian/wetland vegetation, unless no possible alternative site exists. If the water source is necessary and no possible alterative site exists, appropriate mitigation measures (such as fencing or season of use adjustments) will be implemented.

New spring developments will be fenced.

Placement of salt and mineral blocks in riparian/ wetland areas will not be allowed.

Study enclosures will be established in riparian/ wetland sites to compare progress, evaluate management, and confirm recovery rates. This will be a cooperative effort with the Permittees.

Riparian/wetland areas are functioning properly when adequate vegetation, landform, or large woody debris are present to dissipate stream energy associated with high water flows, thereby reducing erosion and improving water quality; filter sediment, capture bedload, and aid floodplain development; improve floodwater retention and ground water recharge; develop root masses that stabilize streambanks against cutting action; develop diverse ponding and channel characteristics to provide the habitat and the water depth, duration, and temperature necessary for fish production, waterfowl breeding, and other uses; and support greater biodiversity.

The functioning condition of riparian/wetland areas is a result of the interaction among geology, soil, water, and vegetation. Inventory is conducted according to the procedures outlined in the Lentic and Lotic Wetland forms developed by BLM in conjunction with the Montana Riparian/Wetlands Association.

#### Rationale

Vegetation is managed to protect the soils, stabilize watersheds and riparian/wetlands, and provide forage for live stock and wildlife. The benefits from riparian/wetlands exceed the small area they occupy. Trees and other woody vegetation are highly valued in the prairie environment, for they provide many benefits to animals.

Noxious weeds can invade ranges in excellent condition and displace useful forage. Without treatment, weeds will ultimately dominate the area with a tendency to create a monoculture.

#### **WILDLIFE**

Whenever possible and appropriate, habitat enhancements such as islands, or nesting platforms will be constructed on new or existing reservoirs, ponds, potholes, or river systems. Bird ramps will be installed in stock water tanks located on the public lands.

Surface disturbance (other than water developments and fences) will not be authorized within 1/4 mile of sage grouse and sharp-tailed grouse leks. Disturbance will not be authorized within 2 miles of a lek from March 1 through June 15 each year. In addition, no disturbance will be authorized within ½ mile of a raptor nest from March 1 to August 1 each year. Surface disturbance will not be allowed on least tern nesting habitat along the Yellowstone River.

Priority for fishing reservoir construction will be based on proximity to residential areas. The BLM will try to develop self-sustaining game fish populations; however, most reservoirs will be maintained as a put-and-take fishery (stocked yearly). The BLM will try to improve existing reservoirs for fisheries habitat. The BLM also will consider fisheries potential during the design phase of new reservoirs. Fishery habitat improvements could include planting of aquatic species, fencing of reservoirs, placement of structures to provide cover or spawning areas, or increasing reservoir depth for existing fisheries reservoirs (see map 25).

Great blue heron and double-crested cormorant rookeries identified on the public lands will be protected. Surface disturbance will not be allowed within 1,000 feet of rookeries.

Power lines will follow the recommendations in Suggested Practices for Raptor Protection on Power Lines (Olendorff et al. 1981).

Aerial hunting of predators will be permitted in the planning area subject to the stipulations outlined in the Annual Animal Damage Control Plan (USDA 1993).

The BLM will continue to be proactive in their management of threatened and endangered species, as well as those species which are candidates for listing. Management will be directed at recovering those species which are currently listed as threatened or endangered, and maintaining and enhancing habitat for those species which are candidates for listing.

The BLM "Special Status Species" list was approved on May 6, 1994, (see Wildlife appendix). These species include those that could easily become endangered or extinct in a state. These species will

receive protection to that extent which is afforded to candidate species. This means BLM will conduct no actions which could contribute to these species being listed as threatened or endangered.

BLM manages existing prairie dog habitat for black-footed ferret recovery, associated species, viewing, and recreational shooting.

Actions affecting prairie dogs or their habitat is a cooperative effort among the affected landowners, the BLM, the U.S. Fish and Wildlife Service, the Montana Department of State Lands, and the Montana Department of Fish, Wildlife and Parks. Management actions could include prairie dog expansion, reintroduction, management of the recreational shooting of prairie dogs, plague abatement, or prairie dog control. BLM will pursue exchanging lands with willing landowners to acquire additional prairie dog habitat.

Management of prairie dog colonies on public lands is subject to the Miles City District Black-tailed Prairie Dog Management Plan (see Wildlife appendix). This plan states that prairie dog towns that occur on the public lands, and do not cause significant adverse impacts to the soil and vegetation resources, are to be managed for wildlife and recreational values.

Prior to surface-disturbing activities, prairie dog complexes greater than 80 acres require a black-footed ferret clearance according to U.S. Fish and Wildlife Service standards. If black-footed ferrets are not evident, activities can be authorized.

If prairie dog control is proposed, and state or private lands are involved, a cooperative effort will be employed. Before controlling prairie dogs on public lands, the BLM will:

Consult with the grazing permittee and the Montana Department of Fish, Wildlife and Parks. Additional consultation will be conducted with the U.S. Fish an Wildlife Service as required by Section 7 of the Endangered Species Act.

Complete a damage assessment to determine the nature and extent of resource damage attributable to prairie dogs by identifying changes in condition, forage availability, and soil loss.

Prepare or revise allotment management plans, habitat management plans, and coordinated resource management plans to include prairie dog management objectives and to identify management actions that provide for resource recovery.

Complete an inventory on each prairie dog town for federally listed threatened and endangered species.

The BLM will investigate the possibility of using nontoxic methods (perch poles, barriers, water and vegetation enhancement) for prairie dog control.

Prairie dog towns on public land (1,151 acres) and the public land core area around them (10,015 acres) will be designated the Black-footed Ferret Area of Critical Environmental Concern (11,166 public surface acres, see ACEC appendix and map 23). Prairie dog towns will be allowed to expand on the public lands within the Black-footed Ferret Area of Critical Environmental Concern.

The Black-footed Ferret Area of Critical Environmental Concern will be proactively managed for prairie dogs and those species dependent on that habitat. BLM will manage prairie dog colonies outside the core area as potential black-footed ferret habitat until such time as the BLM, the U.S. Fish and Wildlife Service and the Montana Department of Fish, Wildlife and Parks make a cooperative determination with the private landowners and the Department of State Lands on black-footed ferret reintroduction and recovery. If a cooperative agreement is reached, prairie dog colonies outside of the core area will become part of the reintroduction area.

Should reintroduction occur, future BLM activities that could impact the black-footed ferret or its habitat will require formal consultation with the U.S. Fish and Wildlife Service. If the decision is not to reintroduce the black-footed ferret, the Black-footed Ferret Area of Critical Environmental Concern designation will be dropped and the area managed the same as other prairie dog towns.

The following guidelines could be proposed in the Black- footed Ferret Area of Critical Environmental Concern if the decision is made to reintroduce black-footed ferrets:

Animal damage control will be allowed with restrictions about the placement of M44s, traps, and snares, to avoid accidental killing or loss of black-footed ferrets.

Recreational activities (varmint shooting, camping, rock hounding, or sight-seeing) will be allowed, and managed to prevent adverse impacts to the black- footed ferret.

Hunting and trapping will be allowed according to state game laws and regulations.

Predator control and monitoring for diseases could be necessary.

A public education program will be developed to explain black-footed ferret management.

The BLM will work with the Montana Black-footed Ferret Work Group on site evaluation as well as other aspects of black-footed ferret recovery.

Within the Black-footed Ferret Area of Critical Environmental Concern (see map 23), livestock grazing and locatable mineral entry will be allowed. Nonenergy leasable minerals and coal will be closed to leasing. Oil and gas leasing will be allowed on the area of critical environmental concern and on the potential black-footed ferret habitat with a controlled surface use stipulation, and geophysical exploration on those acres will not be allowed. Mineral material sales and permits will not be allowed. Rights-of- way construction will be avoided. Off-road vehicle use will be limited to the existing roads and trails.

The piping plover site (16 public surface acres) will be designated the Piping Plover Area of Critical Environmental Concern (see ACEC appendix and map 27). The Piping Plover Area of Critical Environmental Concern is unsuitable for coal development. Locatable mineral entry will be withdrawn and nonenergy leasable mineral leasing will be closed. Rights-of-way construction will be avoided. Mineral material sales and permits, and geophysical exploration

will not be allowed. Livestock grazing will not be allowed from May 1 through July 15. Oil and gas leasing will be allowed with a no surface occupancy stipulation. Off-road vehicle use will be designated as limited to the existing roads and trails.

In crucial winter range (see map 24), the following activities will be allowed: locatable mineral development, mineral material sales, and permits and nonenergy leasable mineral development. Crucial winter range will be unsuitable for coal development. Oil and gas development will be allowed with a timing restriction from December 1 through March 31 each year on 700,979 public mineral acres. Geophysical exploration will not be allowed on those acres during that same period. Livestock grazing and rights-of- way construction will be allowed. Off-road vehicle travel will be limited to the existing roads and trails.

Monitoring will be conducted as described in Table 58 of the Monitoring appendix.

#### Rationale

Management actions are to ensure optimum populations and a natural abundance and diversity of wildlife resources on public lands by restoring, maintaining, and enhancing habitat conditions. Specific measurable objectives are incorporated into coordinated resource management plans, habitat management plans or allotment management plans to meet wildlife habitat goals. Grazing management, land treatments, or other improvements are designed and monitored to accomplish these objectives.

In order to help protect sage grouse and sharp-tailed grouse nesting habitat, surface disturbance (other than water developments and fences) is not authorized within 1/4 mile of sage grouse and sharp-tailed grouse leks, or within 2 miles of a lek from March 1 through June 15 each year. In order to protect raptors and least terns, no disturbance will be authorized within ½ mile of a raptor nest from March 1 to August 1 each year, or on least tern nesting habitat.

Fisheries are managed for recreational purposes. In order to effectively manage fisheries on public lands, the BLM will maintain partnerships with state and private interests.

Management actions are restricted in crucial winter ranges, great blue heron and double-crested cormorant rookeries, the Black-footed Ferret Area of Critical Environmental Concern and the Piping Plover Area of Critical Environmental Concern in order to help protect and enhance these areas.

Prairie dog towns provide habitat for a multitude of wildlife species. By maintaining and enhancing existing prairie dog habitat, habitat needed for associated species, black-footed ferret recovery, viewing and recreational shooting will be enhanced.

The Endangered Species Act assigns the responsibility for managing federally listed threatened and endangered species to the Federal Government. BLM's management is focused on trying to bring these species and their habitats to a condition where protective measures by the Endangered Species Act are no longer necessary.